WEST Search History

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DATE: Friday, March 19, 2004

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR	
☐	L6	L5 and (vaccine or adjuvant or immuno$)	67
☐	L5	l2 not l4	141
☐	L4	L3 and l2	23
☐	L3	L1 and (QS-21 or QS21 or QA-21 or QA21)	351
☐	L2	L1 and (weight with ratio)	164
☐	L1	($6sterol) same (saponin or QS-21 or QS21 or QA-21 or QA21 or Quil adj A or (Quil adj A or sapon$5) same (QS$3 or QA$3))	951

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STN Search History

FILE 'HOME' ENTERED AT 13:52:54 ON 19 MAR 2004

L1 QUE (######STEROL) AND (QUIL (A) A OR SAPONIN OR SAPONARIA OR QS-21 OR QS21 OR QA-21 OR QA21)

L4 59 L2 AND (QS21 OR QS-21 OR QA-21 OR QA21 OR (QS OR QA) (A) 21)

L8 1315 L3 AND (CHOLESTEROL) (S) (QUIL (A) A OR SAPONIN OR SAPONARIA OR QS-21 OR QS21 OR QA-21 OR QA21)

(FILE 'HOME' ENTERED AT 13:52:54 ON 19 MAR 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 13:53:10 ON 19 MAR 2004

L1 QUE (######STEROL) AND (QUIL (A) A OR SAPONIN OR SAPONARIA OR Q

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, TOXCENTER' ENTERED AT 13:57:48 ON 19 MAR 2004

L2 3243 S L1
L3 2209 S L2 AND CHOLESTEROL
L4 59 S L2 AND (QS21 OR QS-21 OR QA-21 OR QA21 OR (QS OR QA) (A) 21)
L5 57 S L3 AND L4
L6 41 DUP REM L5 (16 DUPLICATES REMOVED)
L7 2 S L6 AND PY<1998
L8 1315 S L3 AND (CHOLESTEROL) (S) (QUIL (A) A OR SAPONIN OR SAPONARIA
L9 21 S L3 AND (WEIGHT (S) RATIO)
L10 14 DUP REM L9 (7 DUPLICATES REMOVED)
L11 321 S L1 AND (IMMUNO############## OR ADJUVANT OR VACCINE)
L12 294 S L11 AND L3
L13 59 S L11 AND L4
L14 57 S L12 AND L13
L15 41 DUP REM L14 (16 DUPLICATES REMOVED)
L16 0 S L15 NOT L6
L17 997 S L8 AND PY<1998
L18 549 DUP REM L17 (448 DUPLICATES REMOVED)
L19 37 S L18 AND L11
L20 36 S L19 NOT L15
L21 2 S L18 AND L9

L20 ANSWER 3 OF 36 MEDLINE on STN
AN 97088741 MEDLINE
DN PubMed ID: 8934649
TI ISCOMs (**immunostimulating** complexes): the first decade.
AU Barr I G; Mitchell G F
CS CSL Limited, Parkville, Victoria, Australia.
SO Immunology and cell biology, **(1996 Feb)** 74 (1) 8-25. Ref: 152
Journal code: 8706300. ISSN: 0818-9641.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 199701
ED Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970124
AB A little over a decade ago, novel **immunostimulating** complexes (ISCOMs) were described. This review examines the position and progress that ISCOM technology has achieved in the fields of **vaccine** research and medicine over this period. Much of the work on ISCOMs has remained in the area of **vaccine** research where there is still an urgent need for improved **adjuvants** to help combat important diseases such as AIDS, malaria and influenza. Currently the only widely licensed **adjuvants** for human use are the aluminium salts, but with the trend towards highly purified subunit **vaccines**, which are inherently less **immunogenic** than some of the older **vaccines**, potent **adjuvants** capable of promoting specific immune responses are required. ISCOMs are one such technology that offers many of these requirements and as their use in **vaccines** enters its second decade clinical trials are commencing that will establish whether these submicron, non-living particles composed of **saponin**, **cholesterol**, phospholipid and in many cases protein, are useful components for a range of human **vaccines**.

L20 ANSWER 9 OF 36 MEDLINE on STN
AN 90237592 MEDLINE
DN PubMed ID: 2634709
TI Quaternary structure of the **immunostimulating** complex (iscom).
AU Ozel M; Hoglund S; Gelderblom H R; Morein B
CS Robert Koch-Institute of the Federal Health Office, Berlin, Federal Republic of Germany.
SO Journal of ultrastructure and molecular structure research, **(1989 Dec)** 102 (3) 240-8.
Journal code: 8612238. ISSN: 0889-1605.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199006
ED Entered STN: 19900706
Last Updated on STN: 19970203
Entered Medline: 19900607
AB Proteins of either HIV-1, hepatitis B, or rabies virus were incorporated with the **adjuvant** substance **Quil A** and **cholesterol** into the **immunostimulating** complex: iscom. Formation and symmetry of this regular complex were analyzed by electron microscopy. Micellar structures with a diameter of about 12 nm,

occasionally with a 7-nm stain-filled center, were formed in a 0.03% water suspension of **Quil A**. Cavities or holes appeared in the smooth structures of **cholesterol** upon the addition of **Quil A**, and after mixing **Quil A** and **cholesterol** 1:1 fragile and flattened structures of matrix were produced with a diameter of about 40 nm. By freeze-drying the matrix was preserved as a cage-like, isometric particle. Stable iscom particles composed of **Quil A**, **cholesterol**, and selected viral proteins had an approximate diameter of 32 nm. The particles had an uniform, cage-like structure, exhibiting icosahedral symmetry, irrespective of the viral proteins incorporated. Tilting experiments and rotational image analysis indicated that the iscoms were composed of 20 morphological subunits assembled in a pentagonal dodecahedron with a hole on each of the 12 pentagonal faces. The symmetrical shape of the iscom might explain both its remarkable stability and its capacity to efficiently present antigens to the immune system.

L20 ANSWER 10 OF 36 MEDLINE on STN
AN 88251637 MEDLINE
DN PubMed ID: 2838046
TI The requirement of lipids for the formation of **immunostimulating** complexes (iscoms).
AU Lovgren K; Morein B
CS National Veterinary Institute, Department of Virology, Biomedicum, Uppsala, Sweden.
SO Biotechnology and applied biochemistry, **(1988 Apr)** 10 (2) 161-72.
Journal code: 8609465. ISSN: 0885-4513.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198808
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880803
AB The iscom--**immunostimulating** complex--is a highly **immunogenic** formulation of microbial membrane antigens. The biochemically analyzed components of the iscom are the protein and the glycoside **Quil A**. Continued analysis of the iscom showed that the protein moiety--the antigen--does not contribute to the iscom as a construct. Instead, **cholesterol** and **Quil A** are the essential structural components assembled together into a typical cage-like structure. A more "fluid" lipid, such as phosphatidylcholine, is needed to facilitate the incorporation of amphipathic poly- or oligopeptides into the iscom matrix.

L20 ANSWER 15 OF 36 MEDLINE on STN
AN 81025618 MEDLINE
DN PubMed ID: 7419284
TI **Saponin** and other haemolysins (vitamin A, aliphatic amines, polyene antibiotics) as **adjuvants** for SRBC in the mouse. Evidence for a role for **cholesterol**-binding in **saponin** adjuvanticity.
AU Bomford R
SO International archives of allergy and applied immunology, **(1980)** 63 (2) 170-7.
Journal code: 0404561. ISSN: 0020-5915.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals
EM 198012
ED Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19801216
AB The hypothesis that the **adjuvant**, as well as the haemolytic, activity of **saponin** depends on binding to **cholesterol** in cell membranes is supported by showing that **cholesterol** absorbs out **adjuvant** activity, and inhibits **immunopotentiation** in vivo when added to the injection mixture. Also, out of a range of haemolytic substances, chosen for their known properties as **adjuvants** or for **cholesterol** binding, the only materials which displayed a comparable activity to **saponin** were the polyene antibiotics Nystatin and Amphotericin B, whose binding to membrane **cholesterol** causes similar morphological changes to that of **saponin**.

L20 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:410535 CAPLUS
DN 125:56216
TI **Saponin** preparations and use thereof in ISCOMs
IN Cox, John Cooper; Coulter, Alan Robert; Morein, Bror; Lovgren-Bengtsson, Karin; Sundquist, Bo
PA Iscotec Ab, Swed.
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9611711	A1	19960425	WO 1995-AU670	19951012 <--
	W: AU, CA, FI, JP, KR, NO, NZ, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2201611	AA	19960425	CA 1995-2201611	19951012 <--
	AU 9536444	A1	19960506	AU 1995-36444	19951012 <--
	AU 686891	B2	19980212		
	ZA 9508600	A	19970414	ZA 1995-8600	19951012 <--
	EP 785802	A1	19970730	EP 1995-933981	19951012 <--
	EP 785802	B1	20011212		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508301	T2	19980818	JP 1995-512788	19951012
	NZ 333608	A	20010330	NZ 1995-333608	19951012
	AT 210463	E	20011215	AT 1995-933981	19951012
	NO 9701622	A	19970610	NO 1997-1622	19970409 <--
	FI 9701498	A	19970610	FI 1997-1498	19970410 <--
	US 6352697	B1	20020305	US 1999-809987	19990222
PRAI	AU 1994-8732	A	19941012		
	NZ 1995-293882	A1	19951012		
	WO 1995-AU670	W	19951012		

AB A preparation of **saponins** of Quillaja **saponaria**, comprises fractions of **Quil A** having good **adjuvant** activity, low hemolytic activity and good ability to form **immunostimulatory** complexes (ISCOMs). **Quil A** fractions (QH-A.apprx.C and QH703) were purified from Quillaja bark extract, formed ISCOMs with **cholesterol** and/or phosphatidylcholine, and used as **vaccine adjuvant** for influenza virus HA or diphtheria toxoid. Interleukin 1 induction by various mixts. of Quillaja **saponins** induces, and clin. safety of ISCOM matrix prepared from QH703 in human were also demonstrated.

L20 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:542224 CAPLUS
DN 115:142224
TI Complexes having **adjuvant** activity in **vaccine** preparation
IN Mackenzie, Neill Moray; O'Sullivan, Angela Marie
PA Cooper's Animal Health Ltd., UK
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 415794	A1	19910306	EP 1990-309570	19900831 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 4981684	A	19910101	US 1989-426050	19891024 <--
	CA 2064911	AA	19910302	CA 1990-2064911	19900831 <--
	WO 9103256	A1	19910321	WO 1990-GB1351	19900831 <--
	W: AU, CA, HU, JP, SU				
	AU 9063355	A1	19910408	AU 1990-63355	19900831 <--
	AU 637405	B2	19930527		
	DD 297331	A5	19920109	DD 1990-343761	19900831 <--
	ZA 9006977	A	19920527	ZA 1990-6977	19900831 <--
	HU 61205	A2	19921228	HU 1992-666	19900831 <--
	HU 214110	B	19971229		
	JP 05500056	T2	19930114	JP 1990-512423	19900831 <--
	PL 168055	B1	19951230	PL 1990-286711	19900831 <--
	PL 168316	B1	19960229	PL 1990-308524	19900831 <--
	EP 766967	A1	19970409	EP 1996-202059	19900831 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 5178860	A	19930112	US 1990-611543	19901207 <--
	LV 10394	B	19951020	LV 1993-753	19930629 <--
PRAI	GB 1989-19819		19890901		
	US 1989-426050		19891024		
	EP 1990-309570		19900831		
	WO 1990-GB1351		19900831		

AB "Empty" iscom (**immuno**-stimulating complexes) matrixes, ie. formed without an antigen, have been found to provide an **adjuvant** formation for a sep. antigen in a **vaccine** formulation, the antigen being associated with a bacterium or mycoplasma. These and conventional iscoms can be formed without removing the solubilizing agent used for the antigen. In each case, the iscom can be 3-dimensional or, if formed without phospholipid, 2-dimensional. The glycoside is preferably **Quil A** and the **sterol** is preferably **cholesterol**.

L20 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:589646 CAPLUS
DN 113:189646
TI **Adjuvant**-lipid complexes for use as modified **adjuvants** in preparing **vaccines**
IN Buroru, Morein
PA Loevgren, Karin, Swed.
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02092996	A2	19900403	JP 1988-247295	19880930 <--
PRAI	JP 1988-247295		19880930		

AB The title complex **adjuvant** free of antigenic determinant activity is prepared by mixing **cholesterol** in organic solvents or detergent solns. with ≥1 hydrophobic **saponins**, **adjuvants**, and other lipids, and the mixture is dialyzed, gel filtrated, or electrophoresed to remove the organic solvents or detergent solns. The **saponins** are triterpenoid **saponins**, especially **Quil A** or its subfractions. **Vaccines** prepared with the modified **adjuvant** have min. side effects. Preparation of MDP (muramyl dipeptide) **adjuvant** peptide-phosphatidylethanolamine-**cholesterol**-phosphatidylcholine-**Quil A** complex is given as an example.

L20 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:605167 CAPLUS
DN 107:205167
TI Process for preparing **immunological** complexes and pharmaceutical composition containing these complexes
IN De Vries, Petra; Van Wezel, Antonius Ludovicus; Beuvery, Eduard Coen
PA De Staat der Nederlanden Vertegenwoordigd Door de Minister van Welzijn, Volksgezondheid en Cultuur, Neth.
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 231039	A1	19870805	EP 1987-200035	19870113 <--
	EP 231039	B1	19920108		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
	DK 8700150	A	19870715	DK 1987-150	19870113 <--
	DK 166762	B1	19930712		
	AT 71303	E	19920115	AT 1987-200035	19870113 <--
	ES 2039229	T3	19930916	ES 1987-200035	19870113 <--
	JP 63002933	A2	19880107	JP 1987-7384	19870114 <--
	JP 2502558	B2	19960529		
	US 4900549	A	19900213	US 1987-3070	19870114 <--
	CA 1279012	A1	19910115	CA 1987-527289	19870114 <--
	JP 08208513	A2	19960813	JP 1995-309056	19951128 <--
	JP 2703528	B2	19980126		
PRAI	NL 1986-66		19860114		
	EP 1987-200035		19870113		

AB An **immunogenic** complex is prepared by contacting an amphoteric antigenic protein or peptide in dissolved or solubilized form with a solution containing a detergent, a **sterol**, and a glycoside comprising hydrophobic and hydrophobic regions in at least the critical micelle forming concentration with subsequent removal of the detergent and purification of the formed **immunogenic** complex. Measles virus fusion protein was produced and purified by known methods and incorporated into an **immunogenic** complex by treating fusion protein (60 μg) with 180 μL Tris-HCl (pH 7.8), 150 mM NaCl, 2% octylglucoside, and 350 μg phosphatidylethanolamine and 350 μg **cholesterol** in 700 μL 2% octylglucoside for 1 h at room temperature, addition of 1.7 mg **Quil A** (10% weight/volume), removal of octylglucoside by dialysis against 10 mM Tris-HCl (pH 7.8) and 150 mM NaCl for 16 h at 4°, and purification

via ultracentrifugation (continuous sucrose gradient), and electron microscope examination of the product-containing fractions (micrograph shown).

L20 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1966:62261 CAPLUS
DN 64:62261
OREF 64:11692c-d
TI Research on **saponin**, an **adjuvant** substance and stimulant of immunity
AU Richou, R.; Lallouette, P.; Jensen, R.; Belin, Cl.
SO Revue d'Immunologie (**1965**), 29(4-5), 205-19
CODEN: RIMMAZ; ISSN: 0035-2454
DT Journal
LA French
AB Different lots of **saponin** (I) had different capacities in regard to hemolytic activity, lethal dose in mice, and inflammatory effect, with no relation between the 3 properties. I heated 0.5 or 1 hr. at 70° or 0.5 hr. at 100° was not changed in inflammatory capacity and lethal or hemolytic properties and no modification was seen in the capacity to stimulate immunity to staphylococci when used as an **adjuvant**. I neutralized by **cholesterol** lost most of its lethal action but was as active in provoking inflammation as I alone. Certain actions of I were compared to synthetic detergents and some common properties were found.

L20 ANSWER 30 OF 36 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1992:477030 BIOSIS
DN PREV199294108405; BA94:108405
TI PREPARATION OF **IMMUNOSTIMULATING** COMPLEXES ISCOM CONTAINING BOVINE HERPESVIRUS 1 PROTEINS.
AU FRANZ J [Reprint author]; HAMPL J; STEPANEK J; SMID B
CS VET RES INST, 621 32 BRNO
SO Acta Veterinaria Brno, (1992) Vol. 61, No. 1, pp. 37-41.
CODEN: ACVTB9. ISSN: 0001-7213.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 27 Oct 1992
Last Updated on STN: 27 Oct 1992
AB A method for obtaining ISCOMs with incorporated bovine herpesvirus 1 (BHV-1) proteins from various amounts of **cholesterol**, phosphatidylcholine and **Quil A** is described. The highest virus protein incorporation rate obtained was 25%. Morphology of ISCOMs depended on amounts of **Quil A**, **cholesterol** and phosphatidylcholine used. A high **immunogenicity** of BHV-1-ISCOM, as compared with free virus-proteins, was confirmed experimentally in mice.

L20 ANSWER 32 OF 36 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 95159377 EMBASE
DN 1995159377
TI **Immunostimulating** complexes. Clinical potential in **vaccine** development.
AU Morein B.; Lovgren K.; Ronnberg B.; Sjolander A.; Villacres-Eriksson M.
CS Swedish Univ. of Agricultural Scis., Faculty of Veterinary Medicine, Biomedical Centre, Box 585,S-751 23 Uppsala, Sweden
SO Clinical Immunotherapeutics, (1995) 3/6 (461-475).
ISSN: 1172-7039 CODEN: CIMMEA

CY New Zealand
DT Journal; General Review
FS 004 Microbiology
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LA English
SL English
AB An **immunostimulating** complex (iscom) is a particle containing several copies of an antigen, with a built-in **adjuvant**. It is constructed to provide a physically optimal presentation of antigen to the immune system. An iscom particle without incorporated antigen is called the iscom matrix, or just matrix, and can be used as a conventional **adjuvant** that is added to the antigen whose **immunogenicity** is to be reinforced. The unique components of the iscom matrix are **saponins** (triterpenoids) from the tree Quillaja **saponaria** , which exhibit a unique affinity for **cholesterol** and thereby facilitate the stability of the complex. The triterpenoids can be used as a crude preparation of Quillaja **saponins** or as purified preparations of Quillaja triterpenoids. The various triterpenoids have different characteristics, of which some are relevant to **vaccine** development such as the iscom-forming capacity, the **immunomodulatory** capacity, a low cell lytic property and low toxicity in general. Consequently, various compositions of triterpenoids, including efficient nontoxic **adjuvant** formulations or inert carrier formulations, can be made. The currently used iscom **vaccine** and experimental **vaccines** induce a broad immune response, including major histocompatibility complex (MHC) class I and II T cell responses. The MHC class II response encompasses a prominent response of T helper 1 (T(H)1)-like cells, producing interleukin (IL)-2 and interferon-γ and favouring cell-mediated immunity. A T(H)2-like response may also be evoked, with cells producing IL-4 and IL-10 and promoting humoral immunity. However, the same influenza virus envelope antigen in a micellar nonadjuvanted torm induces a more prominent T(H)2 type of response, with cells producing more IL-10. The iscom particle is also an interesting nonreplicating candidate for induction of mucosal immunity. Iscoms containing different kinds of antigens in various experimental **vaccines** evoke secretory IgA or cytotoxic T cell responses when administered orally and intranasally. Experimental iscom **vaccine** formulations have been shown to induce protective immunity to a number of micro-organisms, including viruses and retroviruses, parasites and bacteria, in several species, including primates.

L20 ANSWER 35 OF 36 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 80:420831 SCISEARCH
GA The Genuine Article (R) Number: KJ163
TI **SAPONIN** AND OTHER HEMOLYSINS (VITAMIN-A, ALIPHATIC-AMINES, POLYENE ANTIBIOTICS) AS **ADJUVANTS** FOR SRBC IN THE MOUSE - EVIDENCE FOR A ROLE FOR **CHOLESTEROL**-BINDING IN **SAPONIN** ADJUVANTICITY
AU BOMFORD R (Reprint)
CS WELLCOME RES LABS, DEPT EXPTL IMMUNOBIOL, BECKENHAM BR3 3BS, KENT, ENGLAND (Reprint)
CYA ENGLAND
SO INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY, (**1980**) Vol. 63, No. 2, pp. 170-177.
DT Article; Journal
FS LIFE
LA ENGLISH
REC Reference Count: 25

L20 ANSWER 36 OF 36 TOXCENTER COPYRIGHT 2004 ACS on STN
AN 1990:163339 TOXCENTER
CP Copyright 2004 ACS
DN CA11321189646F
TI **Adjuvant**-lipid complexes for use as modified **adjuvants** in preparing **vaccines**
AU Buroru, Morein
CS ASSIGNEE: Loevgren, Karin
PI JP 9092996 A2 3 Apr 1990
SO (**1990**) Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF.
CY SWEDEN
DT Patent
FS CAPLUS
OS CAPLUS 1990:589646
LA Japanese
ED Entered STN: 20040200
Last Updated on STN: 20040200
AB The title complex **adjuvant** free of antigenic determinant activity is prepared by mixing **cholesterol** in organic solvents or detergent solns. with ≥1 hydrophobic **saponins**, **adjuvants**, and other lipids, and the mixture is dialyzed, gel filtrated, or electrophoresed to remove the organic solvents or detergent solns. The **saponins** are triterpenoid **saponins**, especially **Quil A** or its subfractions. **Vaccines** prepared with the modified **adjuvant** have min. side effects. Preparation of MDP (muramyl dipeptide) **adjuvant** peptide-phosphatidylethanolamine-**cholesterol**-phosphatidylcholine-**Quil A** complex is given as an example.

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#17	Search **#16 not #2**	14:59:38	22
#16	Search **#15 AND #13**	14:58:04	22
#15	Search **(sapon* or Quil A or QS-21 or qs21 or qa21 or qa-21) AND (stabil* or hydrol* or reactogen* or toxic*)** Field: **Title/Abstract**	14:57:22	688
#14	Search **(sapon* or Quil A or QS-21 or qs21 or qa21 or qa-21) AND (stabil* or hydrol* or reactogen* or toxic*)**	14:53:36	1585
#13	Search **#11 not #2** Field: **Title/Abstract,** Limits: **Publication Date to 1997**	14:52:33	246
#12	Search **#11 not #2** Field: **Title/Abstract,** Limits: **Publication Date to 1997**	14:51:43	246
#11	Search **cholesterol AND (sapon* or Quil A or QS-21 or qs21 or qa21 or qa-21)** Field: **Title/Abstract,** Limits: **Publication Date to 1997**	14:51:12	258
#10	Search **cholesterol AND (sapon* or Quil A or QS-21 or qs21 or qa21 or qa-21)** Field: **Title/Abstract,** Limits: **Publication Date to 1998**	14:50:23	273
#2	Search **#1 AND (iscom or adjuvant or liposome)** Field: **Title/Abstract**	14:49:51	22
#1	Search **cholesterol AND (sapon* or Quil A or QS-21 or qs21 or qa21 or qa-21)** Field: **Title/Abstract**	14:38:49	333

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